

## CLAIMS

What is claimed is:

1. A high speed channel selector switch comprising:  
a first unit comprising a plurality of contacts operable to electrically couple to a plurality of high speed data lines of a device under test, said first unit further comprising a signal contact operable to electrically couple to a signal line; and  
a second unit operable to selectively electrically couple one of said plurality of contacts to said signal contact and further electrically couple remaining ones of said plurality of contacts to a plurality of respective termination impedances such that one of said plurality of high speed data lines is coupled to said signal line and remaining ones of said plurality of high speed data lines are coupled to said plurality of respective termination impedances.
2. The high speed channel selector of Claim 1, wherein said second unit rotates relative to said first unit.
3. The high speed channel selector of Claim 1, wherein said plurality of contacts are configured in a circle.
4. The high speed channel selector of Claim 3, wherein said signal contact is located in the center of said circle.
5. The high speed channel selector of Claim 1, wherein one of a plurality of input channels is selectable.
6. The high speed channel selector of Claim 1, wherein one of a plurality of output channels is selectable.

7. The high speed channel selector of Claim 1, wherein said first unit is operable to be fixed to an evaluation board.
8. The high speed channel selector switch of Claim 1, wherein said plurality of respective termination impedances is disposed within said second unit.
9. An evaluation board comprising:
  - a plurality of high speed data lines operable to couple to high speed channels of a device under test;
  - a high speed connector; and
  - at least one high speed channel selector switch comprising:
    - a first unit comprising a plurality of contacts electrically coupled to said plurality of high speed data lines and said first unit further comprising a signal contact electrically coupled to said high speed connector; and
    - a second unit comprising a plurality of termination impedances and operable to selectively electrically couple contacts of said plurality of contacts to respective termination impedances of said plurality of termination impedances and further operable to selectively electrically couple one of said plurality of contacts to said signal contact in order to select a high speed channel.
10. The evaluation board of Claim 9, wherein said second unit further comprises a through line.
11. The evaluation board of Claim 9, further comprising a plurality of said high speed channel selector switches, wherein said evaluation board is operable to be used to test multiple channels simultaneously.
12. The high speed channel selector of Claim 9, wherein said plurality of contacts are configured in a circular pattern.

13. The high speed channel selector of Claim 12, wherein said signal contact is located in the center of said circular pattern.

14. The high speed channel selector of Claim 9, wherein a signal from said high speed connector is routable to one of said plurality of high speed channels of said device under test.

15. The high speed channel selector of Claim 9, wherein a single channel of said plurality of high speed channels of said device under test is routable to said high speed connector.

16. The high speed channel selector switch of Claim 9, wherein said plurality of respective termination impedances is disposed within said second unit.

17. A high speed channel selector switch comprising:

a first unit comprising a first plurality of high speed channel pads coupled to input/output lines and said first unit further comprising an additional high speed channel pad coupled to a pass-through line; and

a second unit comprising a second plurality of high speed channel pads, wherein a first and a second of said second plurality of high speed channel pads are electrically coupled together and remaining of said second plurality of high speed channel pads are electrically coupled to termination impedances;

wherein said first and said second of said second plurality of high speed channel pads are operable to selectively electrically couple said additional high speed channel pad to a selected one of said first plurality of high speed channel pads to select a high speed channel; and

wherein at least one of said second plurality of high speed channel pads is operable to selectively electrically couple at least one of said first plurality of high speed channel pads to a termination impedance of said termination impedances.

18. The high speed channel selector of Claim 17, wherein said first plurality of high speed channel pads are configured in a circular pattern.
19. The high speed channel selector of Claim 18, wherein said additional high speed channel pad is located in the center of said circular pattern.
20. The high speed channel selector of Claim 17, wherein said termination impedances are disposed within said second unit.
21. The high speed channel selector of Claim 17, wherein said first unit and said second unit comprise a microwave substrate material.